

**Feedback Issues in Spheromaks\***

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Spheromaks offer a potentially attractive reactor because of the lack of a central column and other features. The Sustained Spheromak Physics Experiment, SSPX, has been proposed; initially it will address confinement but a second phase will require control of MHD modes to allow long -pulse operation. This presentation reviews MHD stability, including the tilt/shift and higher  $n$  modes, and outlines issues associated with their feedback control. The possibility of using current profile control of tearing modes is also considered: feedback from external coils or from heating or current drive systems could control the mode amplitude by local current profile control. Optimization would improve energy confinement and maximize the beta limits to pressure driven modes.

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